Original Research   **Open Access**

The Effects of Liquidity, Profitability and Board Characteristics on Debt Restructuring Likelihood Among Malaysian GLCs

Adilah Azhari[*]
School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia

Hanita Kadir
School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia

Abstract
This study investigates the cross-sectional variation in debt restructuring among Malaysian publicly listed Government Linked companies (GLCs) and non-GLCs (NGLCs) for the period of from 2005 to 2015. It attempts to test several firm determinants that can influence the likelihood of Malaysian GLCs to exercise debt restructuring. Past studies argue that liquidity and profitability influences firm's choice to exercise debt restructuring. This study proposes variants of board of characteristics as one of the influential factors in GLCs debt restructuring since board of directors for this type of organization are usually controlled or owned by government. We employ imbalanced panel data with logistic regression as the method of analysis. The findings show that liquidity, profitability and board characteristics have significant relationship with debt restructuring. The results for profitability indicates that firm with low profitability has higher chance for debt restructuring exercise. However, liquidity has recorded an opposite relationship in our sample. This may be due to our liquidity measures the focuses on short term assets which is less appropriate in debt restructuring context. With regards to board characteristics, three variables such as board size, fraction of Malay directors and fraction of directors with Master degrees show negative and significant relationship influence on the debt restructuring.

Keywords: Debt restructuring; GLCs; Non-GLCs; Board characteristics; Logistic regressions.

1. Introduction

In Malaysia, the government has proactively involved in government linked companies (GLCs). GLCs, which comprise of 36 percent of the market capitalization of the Malaysian stock market, play a significant role in the development of the country's economy (Mokhtar, 2005). Government linked companies (GLCs) are defined as companies which Malaysian government hold a substantial control stakes through government investment arms, namely Khazanah Nasional Berhad (KNB), Kumpulan Wang Simpanan Pekerja (KWSP), Kumpulan Wang Amanah Pencen (KWAP), Lembaga Tabung Angkatan Tentera (LTAT), Lembaga Tabung Haji (LTH), Kementerian Kewangan Diperbadankan (MKD), and Permodalan Nasional Berhad (PNB). Through these government-linked Investment Companies (GLICs, these GLCs enjoy benefits such as political connection, government subsidies, tax discounts, market power or monopoly and to some extent, government obligations to rescue the outstanding debt from default (Al-Dhamari and Ku Ismail, 2014). As the majority shareholders, government plays a crucial role in setting the financial policy of GLCs to ensure their success.

With this regard, Putrajaya Committee on GLC High Performance (PCG) was formed in January 2005 to monitor and enhance the performance of GLC and also governance of GLCs. Despite the establishment of this committee, recent reports show that Malaysia GLCs are not shielded from financial trouble (Wall Street Journal and The Star). Previous studies show that weaker law enforcement and government corruption are associated with higher corporate debt ratios and shorter debt maturity (Demirguc-Kunt and Maksimovic, 1998; Fan *et al.*, 2012). For example, Malaysian Airlines System (MAS) has undergone 4 phases of debt restructuring from 2001 to 2014. During the time period, Malaysian Government had injected more than RM19 billion worth of rights issues and government-backed debt as part of the ailing national airlines debt restructuring (Laryea, 2010) plan.

Debt can be thought of as a type of debtholder monitoring and relationship-building agent. Higher debt than optimal level would put a firm in default risk which would lead to bankruptcy. Debt can also help managers to control their free cash flow spending (Jensen, 1986). However, poor credit policy can lead to higher credit risk and impact the firms' ability to meet the interest and principal payments. When incentive problems exist in firms, corporate policy and productivity will deteriorate. For example, La *et al.* (1998) document that legal protection and integrity of legal system will influence the choice between debt or equity and the maturity term for debts. The lack of monitoring power by debtholders and capital market may exacerbate the high debt level particularly in companies in which they are controlled by government or state-owned companies. This is a normal phenomenon in Malaysian market in which government linked companies are established to achieve certain aspiration of the government.

This study examines the effect of liquidity, profitability and board characteristics on the likelihood of debt restructuring exercises for GLCs and matching sample of non-GLCs firms in Malaysia. The findings suggest that low liquidity and lack of board expertise may increase the chance for debt restructuring.

*Corresponding Author

2. Literature Review and Hypothesis Development
2.1. Liquidity and Debt Restructuring

Liquidity refers to the ability of firms to meet their short-term obligations particularly on interest rate payment Past studies on GLCs performance argues that there is a positive relationship with liquidity (Phung and Mishra, 2015) and no relationship between the variable with debt restructuring.   However, as far as the study is concerned, there is no study done which examine liquidity of firms and likelihood for debt restructuring. However, as argued by, Butler et al. (2005), leverage can be easily influenced by the firm's liquidity by means of stock offerings as a form of external financing, making it evident that capital structure of a firm is directly related to liquidity. Most of previous studies supported that high liquidity firms tend to borrow less for their future growth as predicted with the Pecking Order Theory. In general, negative relationship between liquidity and leverage as there is no urgent need for external financing because firms having high liquidity finance their future investment by using the current assets that they have (Dzolkarniani, 2006). Therefore, lower debt means lesser need for a company to restructure its debt in its capital structure. Thus, in the context of debt restructuring In GLCs, it is hypothesized that:

Hypotheses 1: GLCs with high liquidity is less likely to exercise debt restructuring

2.2. Profitability and Debt Restructuring

Profitability is a benchmark of performance for a firm. Previous study by Keasey and McGuinness (1995) look at the profitability and efficiency ratio to determine the firm performance following debt restructuring plan. Charitou et al. (2004), use profitability as one of the measurements for their study on financial distress for UK companies. Meanwhile, Tykvova and Borell (2012) focus on liquidity, profitability and solvency ratio as variables for firm performance. As firm's profitability will reduce the needs for external financing such as debt, this will indicate that decrease in profitability will increase the likelihood of debt restructuring as firm's with reduced profits will struggle to meet their debt obligations.

Hypotheses 2: GLCs with high profitability is less likely to exercise debt restructuring

2.3. Board Characteristics and Debt Restructuring

Corporate governance has been defined as the entire system of rules, processes and practices by which a company is controlled, directed and managed. The objective of corporate governance is to ensure that company's objectives are achieved, and the interests of all company's stakeholders are fulfilled. The board of directors is usually entrusted to oversee the corporate governance practices in the company. Malaysia Code of Corporate Governance (2012) emphasizes that good corporate governance requires a strong board of directors to govern a corporation. This study argues that certain board characteristics are important determinants as it affects the extent of monitoring, decision making controlling.

Board characteristics also can influence the firm's financial policy. Corporate governance is assumed to play an important role in controlling and monitoring opportunistic behaviour by managers (Fama, 1980). According to Shleifer and Vishny (1997), the divergence of interest between managers and shareholders exists in the absence of effective corporate governance mechanism.

Thus, this study will evaluate whether the internal corporate mechanism could control the existing agency problem. Five board characteristics which are deemed important are hypothesized to have relationship in determining debt restructure. The variables include board size, number of board meeting, fraction of independent directors, fraction of Malay directors on board, and directors' education level.

2.4. Board Size and Debt Restructuring

Past literatures recorded that there are conflicting ideas about board size with some proponent arguments for smaller board size and others contending that larger is better. Generally, each firm will have its own appropriate board size, which depends on the firm's characteristics, such as firm size and complexity of the firm's business. This could also be in firms that contemplate to a corporate exercise such as debt restructuring. Prior empirical studies argue that larger boards are positively associated with leverage (Anderson et al., 2004; Jensen, 1986; Wen et al., 2002). Jensen (1986) argues that larger board membership could result in difficulty in arriving at a consensus in decision making. These conflict arised from bigger board size that have the tendency of weakening corporate governance which consequently leads to higher leverage. Another reason suggested that that large boards, which are more entrenched due to superior monitoring by regulatory bodies, pursue higher leverage to raise company value (Wen et al., 2002). Anderson et al. (2004) also show that the cost of debt is lower for larger boards, presumably because creditors view these firms as having more effective monitors of their financial accounting processes. Since prior studies show mixed results with regards to relationship between board size and level of debt, the next hypothesis is as follows:

Hypotheses 3: There is a relationship between the size of the board of directors and the likelihood of firms to exercise debt restructuring.

2.5. Proportion of Non-Executive Director and Debt Restructuring

One governance feature that has received major attention from researchers is the board of directors' independence. The percentage of directors considered to be outside directors or not related with internal managers (executives) has effect on reducing agency costs between agents (executive managers) and shareholders (Fama, 1980; Fama and Jensen, 1983; Hermalin and Weisbach, 1998).

A board of directors is composed in such a way that it reduces information asymmetries between managers and potential investors. Within this scope, several research studies have found that firms with better corporate governance devices have better information disclosures and less information asymmetry problems e.g. (Beeks, 2004; Dimitropoulos and Asteriou, 2010; Klein, 2002a; Vafeas, 2000). The intuition is that the board of directors is responsible for monitoring the quality of the information contained in financial reports and provided to the shareholders and, therefore boards that do a more effective job of monitoring management enhance the quality and the frequency of public information released by the executive management. Given these arguments, a more independent and diversified board of directors is expected to decrease information asymmetries between managers and investors and therefore should make it easier to issue external securities and risky securities. The reason is that outside financing requires managers to explain to outside investors the need for the funds and therefore expose themselves to investor monitoring if they want to get best price for the securities.

Many papers regarding the relation between corporate governance and cost of debt documented strong evidence of the inverse impact of board independence on the cost of debt. Anderson *et al.* (2004), Ashbaugh-Skaife *et al.* (2006), Paige *et al.* (2012) studying companies in the US demonstrated significant negative association between board independence and the cost of debt, thus confirming the hypothesis that independence provides greater managerial oversight. This result is consistent with the first such evidence in the US provided by Bhojraj and Sengupta (2003). Piot and Missonier-Piera (2007) using a sample of 91 firms over the period 1999-2001 showed that board independence contributes to a lower cost of debt in France. Nevertheless, there are several researches, which discovered insignificant relation between board independence and debtholders in developed markets. Bradley and Chen (2011) found insignificant influence of percentage of independent directors on the cost of debt financing in US but showed negative relation with volatility of stock returns. Lorca *et al.* (2011) and Tanaka (2014) demonstrated non-significant association between independence and cost of debt in Spain and Japan respectively. Therefore, effective and independent boards of directors are necessary to regulate the firm's financial policy and lessen the ongoing friction between upper management and external shareholders (Sharma, 2011). It is therefore hypothesized that:

Hypotheses 4: The greater the firm's proportion of independent directors on its board, the greater likelihood of companies in exercising debt restructuring.

2.6. Board Meeting and Debt Restructuring

According to Malaysian Code of Corporate Governance (MCCG), all firms are required to conduct meetings on quarterly basis. For the most part, studies show that frequent board meetings will lead to better monitoring. It is argued that board meetings and attendance to meetings are important in which the directors obtain firm specific information and able to fulfil their monitoring role (Johl *et al.*, 2015) Therefore, board with information on debt situation of a firm will likely proceed for debt restructuring in the company.

Hypotheses 5: Frequency of board meeting is positively related to debt restructuring

2.7. Directors' Education and Debt Restructuring

Executives' educational background provides an indication of their knowledge and skill base and thus, should affect executive decision. For example, Hitt and Barr (1989) found that managers with higher levels of formal education made different managerial compensation decisions from those with less formal education. Furthermore, Hambrick and Mason (1984) proposed that managers' formal education level was positively related to firm innovation. Highly educated managers are more favourably predisposed toward and more likely to champion innovation. As executives' education increases, their training experiences and paradigmatic perspectives become more complete and well rounded. As a result, Hitt and Tyler (1991) proposed that the amount of education affects executives' cognitive models and thereby their strategic decisions. Executives with higher education (e.g., B.S. vs. M.B.A.) are more likely to have a broader educational experience (e.g., undergraduate degree in engineering or liberal arts and masters degree in business). As a result, their knowledge and cognitive experience likely allows them to manage more complex situations. Thus, a top management team with higher levels of education should be more likely to use strategic controls and forestall board involvement in major strategic decisions.

In addition, education may also affect top management team power, both expert and prestige (Finkelstein, 1992). Top management teams with more education may be perceived to have more expertise, reducing the likelihood that the board would feel it necessary to intervene in strategic decisions. The level of education may also affect prestige, particularly if the graduate degree was earned from one of the elite schools (D'Aveni, 1990), Managers' standing in the' managerial elite' sends powerful signals to others about their personal importance (Finkelstein, 1992), As noted earlier, top management team power helps to forestall active board involvement in major strategic decisions of the firm. As a result, the current study expects a negative relationship between the amount of education of the top management team and board involvement in strategic restructuring.

Hypotheses 6: Education level of the top management team is negatively related to likelihood of debt restructuring

2.8. Fraction of Malay Directors on Board with Debt Restructuring

As pointed in Chuah (1995), Malaysian managers are said to be associated by race, education and type of organization they work for. Race is selected as it signifies class relations and provides a principle according to which "conflicts over wealth and state power takes place" (Van Fossen, 1998, p.89). Furthermore, the effect of race may be of significance in multicultural societies where ethnic groups prefer to maintain its ethnic identity (Sendut, 1991).

Suggests that in general, managers perform the same functions but the way they do it could be different as it may be associated by one's own tradition, values, beliefs and culture.

Malays are normally associated with high uncertainty avoidance, which may be attributed to their strong belief in religion (Haniffa and Hudaib, 2006). Further, this is portrayed by the values of non-assertiveness, conflict avoidance and uneasiness in dealing with ambiguities and uncertainties (Abdullah, 1992). This is especially true when directos need to face a complex decision such as corporate debt restructuring. On the contrary, Chinese are rated low on uncertainty avoidance, as evidenced by their greater acceptance of new challenges and willingness to take greater risk. Since high debt is perceived to put a firm in a financial distress state, its nature of risk would affect the debt level of a company. Thus, there will be less need for this type of firm to restructure its debt in its financial policy. This study hypothesizes the following:

Hypothesis 7: GLCs with high percentage of Malay directors on board is less likely to exercise debt restructuring.

3. Data and Methodology

GLCs sample is identified based in the list provided by PCG. A matching non GLCs are matched with GLCs based on the market capitalization and in the same Bursa Malaysia sectoral classification. The study is then scrutinizes both samples to examine whether they have exercise debt restructuring over 11-year period from 2009 to 2015. The final sample is 33 GLCs and 33non GLCs

Data is analysed using Logistic regression in which 1 is assigned when an observation has completed debt restructuring exercise and 0 if an observation does not involve in the exercise within the specified period. The following model is the specification of this study.

$$DebtRestruc_{it} = \beta_0 + \beta_1 Liquid_{it} + \beta_2 Profit_i t + \beta_3\ board\_size_{it} + \beta_3\ IndpBoard_{it} + \beta_4 BoardMeet_{it} + \beta_5 Frac\_Master_{it} + Control\_variable + \varepsilon_{it}$$

4. Empirical Evidence
4.1. Descriptive Analysis Results

Table 1 presents the overall descriptive statistics of the explanatory variables involved for GLCs. In terms of liquidity, current asset to total asset (CA/TA) represents about 2.305 which shows a very high current ratio. On the other hand, the average of working capital to total asset (WC/TA) is marginally at 0.18. The disparity in WC/TA ranges from –0.575 to 0.729. Similarly, CA/TA has a higher average ratio of 0.428 from WC/TA.

With respect to profitability, this study uses three proxies; Net income to Total asset (NI/TA), Earnings before interest and Taxes to total Asset (EBIT/TA) and Net Income to Sales (NI/SALES). Overall, GLC shows a low profitability of less than 1. While NI/SALES show the highest profitability ratio compared to the other two ratios, it shows greatest dispersion of 0.183.

Table-1. Descriptive statistic for GLCs sample companies

Variable	Obs	Mean	Std. Dev.	Min	Max
CA/CL	304	2.305	1.895	0.330	15.697
WC/TA	304	0.180	0.207	-0.575	0.729
CA/TA	304	0.428	0.198	0.057	0.945
NI/TA	304	0.044	0.060	-0.270	0.471
EBIT/TA	299	0.072	0.065	-0.268	0.525
NI/SALES	304	0.102	0.183	-1.530	1.339
BRD_SIZE	298	8.826	2.258	5.000	15.000
NON_IND_D	275	1.549	0.948	1.000	7.000

Referring to board characteristics, the size of the board (Bsize) across the sample ranges from 5 to 15 with a mean of 8 directors. The minimum number of Malay directors is 2 and maximum is 14. On average, there are 8 Malay directors serve on board of GLC. With regards to board meeting, the maximum number of meetings held s about 27 meetings, which can be considered as very high. However, the minimum meetings held per year indicate that at least one firm met only three times. From the average, it seems that the sample firms are in compliance with the PGC requirements of holding at least six meetings each year.

Table 2 describes a descriptive statistic for the whole sample group. For liquidity, it shows that current ratio has a mean of 2.88 which is considered healthy. There are 19 firms with debt restructuring in the sample period of 2005 to 2016. Average board size is 8 (ln = 2.074815) and average number of board meeting is 6 (ln = 1.829859). On average, 48.64% of board is from Malay ethnicity. The frequency of the board meeting has an average of 5. The mean of profitability is ranged from 5.1% to 9.6% based on profitability measures of NI/TA, EBIT/TA and NI/Sales.

Table-2. Descriptive statistic for all sample companies (GLCs and Non GLCs)

Variable	Obs	Mean	Std. Dev.	Min	Max
CA/CL	670	2.885	3.236	0.097	31.773
WC/TA	670	0.189	-0.298	1.902	0.919
CA/TA	670	0.448	0.219	0.006	0.992
NI/TA	670	0.051	-0.102	1.247	0.618
EBIT/ TA	662	0.082	-0.109	1.242	0.631
NI/Sales	669	0.096	0.392	-4.874	5.374
DUMMYGLC1	689	0.441	0.497	0.000	1.000
DEBTRESTRU~0	671	0.359	0.480	0.000	1.000
LOGBRD_SIZE	652	2.075	0.251	1.386	2.708
FRAC_NON_IND	652	0.250	0.170	0.000	0.714
FRAC_IND_D	652	0.486	0.145	0.000	0.909
FRAC_NONEX~D	652	0.258	0.193	0.000	0.833
LOG_BRD_MEET	639	1.830	0.425	0.000	3.296
_MALAY	652	48.639	45.479	0.000	100.000
_NONMALAY	652	6.090	13.409	0.000	60.000
FRAC_BACHE~R	652	0.361	0.254	0.000	1.200
FRAC_MASTER	652	0.136	0.163	0.000	0.750
FRAC_PHD	652	0.115	0.125	0.000	0.571
FRAC_PROFES	652	0.210	0.238	0.000	1.333
FIRM_SIZE	670	14.222	2.124	9.449	18.579

4.2. Logistic Regression Analysis Results

Panel A of Table 3 records a logistic regression results from sample of GLCs. Model 1 (full model) contains of all variables examined. After considering in removing insignificant variables, a reduced model is produced as depicted in Model 3 and Model 4 of Panel A. In Model 2, two proxies of profitability which are NI/TA and EBIT/TA shows significant negative and significant positive results respectively. However due to multicollinearity factor that could occur among these variables, they are examined in separate regressions as in Model 3 and 4.

Results of logistic regression on GLC sample shows that 3 variables which are CA/TA, BRD_MEET and FIRM_SIZE are positively related to debt restructuring. Final model in Model 4 shows the results of significant positive relationship (coefficient of 4.7444 and p-value of 0.000) between liquidity ratio is inconsistent with our prediction in H1. Possible justification for this effect is because our measure for liquidity focuses on current asset which is less appropriate in investigating a more permanent financing such as debt restructuring. Another reason is that high liquidity would cover only short-term debt. In situation when GLCS has a substantial debt in the form of long term debt, they need more permanent type of asset to cover its long-term debt. Thus, low liquidity ratio as a result of high needs of total asset actually leads to high debt level. This would subsequently cause debt restructuring to occur. Similarly, for number of board meeting, results shows a significant positive relationship (coefficient of 3.302 and p-value of 0.000) which implies as having frequent meeting is associated with debt restructuring possibilities.

Negative relationships are found in NI/TA, BRDSIZE, _MALAY, FRAC_MASTER which indicates an increase in profitability, large board size, higher percentages of Malay directors on board and high percentage of Masters education in directors leads to less probability of debt restructuring occurrence.

Panel B of Table 3 shows a comparison of regression between full model and selective models 2 and 3, it shows that profitability (proxy by NI/TA) gives support to the hypothesis that lower profitability increases the debt restructuring occurrence. Our prediction that low liquidity will have higher occurrence of debt restructuring is unsupported because the results shows that CA/TA is positively related to debt restructuring. We can argue that liquidity may be useful for example in debt rescheduling exercise but may not influence other type of debt restructuring such as interest rates reduction and debt forgiveness. On the corporate governance characteristics, more board meeting increases the likelihood of debt restructuring.

Table-3. Logistic regression results for GLCs

VARIABLE	Model 1	Model 2	Model 3	Model 4
CA/CL	-0.2120			
	(0.4430)			
WC/WL	-1.2330			
	(0.6410)			
CA/TA	8.804***	4.077***	4.411***	4.744***
	0.0000	(0.0010)	0.0000	0.0000
NI/TA	-76.545***	-64.739***		-4.859*
	0.0000	0.0000		(0.0690)
EBIT/TA	60.233***	57.347***	0.6910	
	0.0000	0.0000	(0.7820)	
NI/SALES	2.7410			
	(0.1600)			
LGBRD_SIZE	-4.734***	-4.033***	-3.827***	-3.726***
	0.0000	0.0000	0.0000	0.0000
FRAC_NON_I~D	-2.1080			
	(0.6260)			
FRAC_IND_D	-6.0350			
	(0.1730)			
FRAC_NONEX_D	1.0630			
	(0.7830)			
LG_BRD_MEET	4.631***	3.464***	3.390***	3.302***
	0.0000	0.0000	0.0000	0.0000
_MALAY	-9.2410	-10.4390	-6.4580	-6.2060
	(0.1820)	0.0000	0.0000	0.0000
_NONMALAY	6.3570			
	(0.3660)			
FRAC_BACH	3.3630			
	(0.6500)			
FRAC_MASTER	-3.8840	-5.264***	-3.599***	-3.646***
	(0.6130)	0.0000	0.0020	0.0010
FRAC_PHD	-4.6170			
	(0.544			
FRAC_PROFES	-7.0250			
	(0.3530)			
FIRM_SIZE	1.583***	1.129***	0.885***	0.921***
	0.0000	0.0000	0.0000	0.0000
_CONS	-15.9910	-7.3330	-7.1160	-7.8130
	(0.0240)	(0.0050)	(0.0030)	(0.0010)
chi2	229.3270	195.8580	153.9890	157.5350
Likelihood ratio test (p-value)		33.4700 0.0000	77.9 (0.000)	
				75.3 (0.000)

In other words, frequent board meeting will highlight the problems in debt burdens, and board will likely propose for debt restructuring. It also shows that the higher board education (master or above), the lower the likelihood for debt restructuring. It can be argued that board that has better expertise will likely provide better monitoring and reduce the needs for debt restructuring exercise.

Table 4 presents the logistic regression for full matching sample GLCs and non-GLCs (66 companies). For Model 1 (full model), it shows there are negative and significant relationship for liquidity and profitability proxies. This lends support for hypotheses 1 and 2 where low liquidity and profitability will lead to debt restructuring. Meanwhile, for board characteristics, it shows that frequency of board meeting has positive and significant relationship on debt restructuring as per findings for Table 3 (GLCs only). This supports hypotheses 5 similar with GLCs sample only.

To reduce the multicollinearity problem, the Model 2 and 3 is further tested for proxies of liquidity, profitability and board characteristics. All the results hold in term of relationship strengths. In addition, we find that board Masters education level is negatively associated with debt restructuring. This can be attributed to better monitoring as the level of education increases and supports hypotheses 6.

Table-4. Logistics regression for GLCs and NonGLCs

Variable	Model 1	Model 2	Model 3
CA/CL	-0.15948576		
WC/TA	-5.2987992***		
CA/TA	6.2260677***	1.7470804**	1.8752072***
NI/TA	-16.220682**	-16.657855***	-16.67376***
EBIT/TA	7.0481566	9.9123696*	9.5412692*
NI/SALES	1.2621574**		
DUMMYGLC1	21.428306*	1.1418006	
LOGBRD_SIZE	0.34813686	-.39741679	-0.41716031
FRAC_NON_I~D	3.4033558		
FRAC_IND_D	1.753739		
FRAC_NONEX~D	4.3568906		
LOG_BRD_MEET	2.3888712***	2.181044***	2.2332277***
_MALAY	.22225864*	-0.00945191	0.00201398
_NONMALAY	0.20009249		
FRAC_BACHE~R	0.95710828		
FRAC_MASTER	-1.0484435	-2.268421**	-2.0605086**
FRAC_PHD	-1.3627843		
FRAC_PROFES	0.73980798		
FIRM_SIZE		.18031289**	.18245014**
_cons	-31.967262**	-7.8265396*** -	6.8786488***
chi2	255.07468	152.12949	150.50021
df			
N	627	628	628

legend: * p<.05; ** p<.01; *** p<.001

Finally, we are looking at the sample of companies with debt restructuring exercises. Table 5 shows the summary statistics for 19 companies. Among these companies' record very low profitability (average 1.8% for NI/TA) and higher board size (average 9) compared with total sample of GLCs and non-GLCs. However, when checking for robustness of differences between GLCs and non-GLCs companies, results obtained are not significant.

Table-5. Summary statistics for Firms with Debt Restructuring exercise

Variable	Obs	Mean	Std. Dev.	Min	Max
CA/CL	240	1.864166	1.718632	0.104575	13.95681
WC/TA	240	0.093242	-0.37346	1.902014	0.919138
CA/TA	240	0.451606	0.2304	0.081747	0.99235
NI/TA	240	0.018184	-0.1134	1.246793	0.471185
EBIT/TA	239	0.052953	-0.11748	1.242379	0.524696
NI/SALES	239	0.055599	-0.22398	1.529554	1.338996
DUMMYGLC1	241	0.560166	0.4974	0	1
DEBTRESTRU~0	241	1	0	1	1
LOGBRD_SIZE	233	2.104634	0.234144	1.609438	2.70805
FRAC_NON_I~D	233	0.218802	0.150691	0	0.666667
FRAC_IND_D	233	0.477374	0.117962	0.222222	0.75
FRAC_NONEX~D	233	0.304861	0.184807	0	0.777778
LOG_BRD_MEET	233	2.045064	0.417303	1.098612	3.044523
_MALAY	233	41.10895	46.4349	0	100
_NONMALAY	233	3.363962	9.174249	0	50
FRAC_BACHE~R	233	0.380015	0.246844	0	0.888889
FRAC_MASTER	233	0.158574	0.168125	0	0.666667
FRAC_PHD	233	0.110657	0.118732	0	0.571429
FRAC_PROFES	233	0.194047	0.204186	0	1.333333
FIRM_SIZE	240	14.63827	2.072605	9.865526	18.57864

5. Conclusion

This study focusses on debt restructuring on GLCs. Our findings show that liquidity, profitability and board characteristics have significant relationship with debt restructuring. The results for profitability indicates that firm with low profitability has higher chance for debt restructuring exercise. However, liquidity has recorded an opposite relationship in our sample. This may be due to our liquidity measures the focuses on short term assets which are less appropriate in debt restructuring context. With regards to board characteristics, three variables such as board size, fraction of Malay directors and fraction of directors with Master degrees show negative and significant relationship influence on the debt restructuring. This may be due to board expertise, less efficient in decision making for larger

board size especially in debt restructuring and Malay majority board members leads to delay in urgent decision like restructuring and risk averse on the risky corporate exercise. On the other hand, the higher the number of board meetings, the higher the likelihood for debt restructuring due to increase in monitoring for debt burdens.

The limitations of this study are availability of debt restructuring data from Corporate Debt Restructuring Scheme. Incomplete data also is the inherence in our analysis. In future research, it will be interesting to study the changes in profitability, liquidity and board characteristics after debt restructuring exercises are completed. In order to produce more comprehensive study in the future, more ratio such as performance and earnings management can be included.

Acknowledgements

References

Abdullah, A. (1992). The influence of ethnic values on managerial practices in Malaysia. *Malaysian Management Review,* 27(1): 3-18.

Al-Dhamari, A. R. and Ku Ismail, K. N. I. (2014). Association between board characteristics and earnings quality, Malaysian evidence. *Jurnal Pengurusan,* 41: 43-55.

Anderson, R. C., Mansi, S. A. and Reeb, D. M. (2004). Board characteristics, Accounting report integrity, And the cost of debt. *Journal of Accounting and Economics,* 37(3): 315-42.

Ashbaugh-Skaife, H., Collins, D. W. and LaFond, R. (2006). The effects of corporate governance on firms' credit ratings. *Journal of Accounting and Economics,* 42(1): 203-43.

Beeks (2004). *The new management dualism, The power of ethics in a global organization'. Ethics matters, february, center for business ethics.* Bentley College, MA.:

Bhojraj, S. and Sengupta, P. (2003). Effect of corporate governance on bond ratings and yields, The role of institutional investors and outside directors. *The Journal of Business,* 76(3): 455-75.

Bradley, M. and Chen, D. (2011). Corporate governance and the cost of debt, Evidence from director limited liability and indemnification provisions. *Journal of Corporate Finance,* 17(1): 83-107.

Butler, A., Grullon, G. and Weston, J. (2005). Stock market liquidity and the cost of issuing equity. *Journal of Financial and Quantitative Analysis,* 40(2): 331–48.

Charitou, A., Neophytou, E. and Charalambous, C. (2004). Predicting corporate failures, Empirical evidence for the UK. *European Accounting Review,* 13(3): 465-97.

Chuah, B. H. (1995). *The unique breed of Malaysian managers, Management Times.* New StraitsTimes: Malaysia.

D'Aveni, R. A. (1990). Top managerial prestige and organizational bankruptcy. *Organization Science,* 1(2): 123-42.

Demirguc-Kunt, A. and Maksimovic, V. (1998). Law, Finance and firm growth. *The Journal of Finance,* 53(6): 2107-37.

Dimitropoulos, P. and Asteriou, D. (2010). Accounting relevance and speculative intensity, Empirical evidence from Greece. *Journal of Applied Accounting Research,* 11(3): 195-212.

Dzolkarniani, M. N. (2006). Capital control regime and capital structure determinants, A Malaysian case. *Malaysian Accounting Review,* 5(1): 1 -46.

Fama, E. F. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy,* 24(2): 288-307.

Fama, E. F. and Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*: 301-25.

Fan, J. P., Titman, S. and Twite, G. (2012). An international comparison of capital structure and debt maturity choices. *Journal of Financial and Quantitative Analysis,* 47(1): 23-56.

Finkelstein, S. (1992). 'Power in top management teams, Dimensions, Measurement, And validation. *Academy of Management Journal,* 35(3): 505-38.

Hambrick, D. C. and Mason, P. A. (1984). Upper echelons, The organization as a reflection of its top managers. *Academy of Management Review,* 9(2): 193-206.

Haniffa, R. and Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting,* 33(7/8): 1034-62.

Hermalin, B. and Weisbach, M. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review,* 88(1): 96-118.

Hitt, M. A. and Barr, S. H. (1989). Managerial selection decision models, Examination of configuralcue processing. *Journal of Applied Psychology,* 74(1): 53-71.

Hitt, M. A. and Tyler, B. B. (1991). Strategic decision models, Integrating different perspectives. *Strategic Management Journal,* 12(5): 327-51.

Jensen, M. (1986). Agency costs of free cash flow, Corporate finance, And takeovers. *The American Economic Review,* 76(2): 323-29.

Johl, S. J., Kaur, S. and Cooper, B. (2015). Board characteristics and firm performance, Evidence from Malaysian public listed firms. *Journal of Economics, Business and Management,* 3(2): 239-43.

Keasey, K. and McGuinness, P. (1995). Underpricing in new equity listings, A conceptual reappraisal. *Small Business Economics,* 7(1): 41-54.

Klein, A. (2002a). Audit committee, Board of director characteristics, And earnings management. *Journal of Accounting and Economics,* 33(3): 375-400.

La, P. R., Lopez, F., Shleifer, A. and Vishny, R. (1998). Law and finance. *Journal of Political Economy,* 106(6): 1113-55.

Laryea (2010). Debt restructuring can be used for debt rescheduling, Interest rates reductions, Debt-for-equity swaps and debt forgiveness.

Lorca, C., Sánchez-Ballesta, J. P. and García-Meca, E. (2011). Board effectiveness and cost of debt. *Journal of Business Ethics,* 100(4): 613-31.

Malaysia Code of Corporate Governance (2012). Securities Commission, Malaysia.

Mokhtar, A. (2005). The Malay way of business change. *The Economist*: Available: http://www.economist.com/node/4307606

Paige, F. L., Fraser, D. R. and Subrahmanyam, A. (2012). Board quality and the cost of debt capital, The case of bank loans. *Journal of Banking & Finance,* 36(5): 1536-47.

Phung, N. D. and Mishra, A. (2015). Ownership structure and firm performance. *Australian Economic Papers,* 55(1): 63-98.

Piot, C. and Missonier-Piera, F. (2007). Corporate governance, audit quality and the cost ofdebt financing of French listed companies. Communication présentée au 28ème Congrès del'Association Francophone de Comptabilité, Poitiers. 1-43.

Sendut, H. (1991). Managing in a multicultural society, The Malaysian experience. *Malaysian Management Review,* 26(1): 61-69.

Sharma, V. (2011). Independent directors and the propensity to pay dividends. *Journal of Corporate Finance,* 17(4): 1001-15.

Shleifer, A. and Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance,* 52(2): 737-83.

Tanaka, T. (2014). Gender diversity in the boards and the pricing of publicly traded corporate debt: evidence from Japan. *Applied Financial Economics,* 24(4): 247-58.

Tykvova, T. and Borell, M. (2012). Do private equity owners increase risk of financial distress and bankruptcy. *Journal of Corporate Finance,* 18(1): 138-50.

Vafeas, N. (2000). Board structure and the informativeness of earnings. *Journal of Accounting and Public Policy,* 19(2): 139-60.

Wen, Y., Rwegasira, K. and Bilderbeek, J. (2002). Corporate governance and capital structure decisions of the Chinese listed firms. *Corporate Governance,* 10(2): 75-83.